



# RF



ORANGE COUNTY AMATEUR RADIO CLUB

Vol. XXV No. 1

P.O. BOX 95, ORANGE, CALIF. 92668

January 1984

\*\*\*\*\* JANUARY PROGRAM \*\*\*\*\*

Even though air fares to Europe have gone way down, there's still a cheaper way to see the country. Come and see Jay & Kathy Hall's slide presentation on their trip through Europe. For the uninformed, Jay and Kathy are WA6MOK and WA6KFI respectively. This is the kind of program that the whole family is sure to enjoy. We guarantee if you come, it will definitely be a meeting and night you'll remember for a long time. See you there!!!

\*\*\*\*\* FEBRUARY PROGRAM \*\*\*\*\*

Ever wonder what all those strange noises were coming out of your 2 meter H/T???? Well if you have, come to the February meeting and listen to Ken Andrews, WA6MSB, from Techtronics. Bring your handheld along too,... the way it works might just surprise the heck out of you. Mark February 17th. on your calendar for a very informative and interesting meeting. This is just a "teaser"---watch for next month's "RF" for more info on Ken's super program.....

Jan 1984

1984 BOARD

President.....	KA6IMP	Chris Breller	651-3911
Vice President....	W6IBP	Dotty Watts	531-6245
Secretary.....	W6MIL	Mac MacInnis	
Treasurer.....	W6HHC	Ken Konechy	541-6249
Activities.....	W6IBR	Al Watts	531-6245
Public Relations..	WB6IXN	Bob Evans	543-9111
Membership.....	WB6LAR	Keith Southworth	893-7175
TVI.....	KA6GJI	Oscar Alonzo	531-4245
Member at Large...	W6IBR	Al Watts	531-6245
Member at Large...	N6JSV	Jim Talcott	838-5395
Club Historian....	WB6IXN	Bob Evans	543-9111
W6ZE Trustee.....	AF6C	Bob Eckweiler	639-5074
VIP Liason.....	WA6RNA	Leonard Victor	892-1820

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MEETINGS

THIRD FRIDAY OF EACH MONTH 7:30 PM

MERCURY SAVINGS and LOAN BUILDING

1095 IRVINE BLVD.

TUSTIN, CA.

(100 Yards east of Newport Blvd. intersection)

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CLUB NETS

<u>DAY</u>	<u>TIME</u>	<u>BAND</u>	<u>MODE</u>	<u>FREQ</u>
TUESDAY	7:00 PM	10M	SSB	28.775
WEDNESDAY	7:00 PM	15M	CW	21.175
WEDNESDAY	8:00 PM	15M	SSB	21.375
WEDNESDAY	9:00 PM	2M	FM	146.550

Look for W6ZE

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CLUB BREAKFAST

Date: First Saturday of each Month

Time: 8:00 AM

Location: MINI'S CAFE  
(just east of 17th St. and 55-FWY)  
17231 17TH Street  
Tustin, Ca.  
544-5522

Jan 1984

\*\*\*\*\* PREZ SEZ \*\*\*\*\*

Happy New Year to all members!!! As I take over the helm of the club, I look forward to what is being planned for the year. The club meetings will be featuring many interesting speakers who will provide a wide variety of programs. Other club activities will include picnics, maybe a T-Hunt or two, a beach party and a few other surprises. If you have any suggested times or additional activities, give me or any of the club officers a call. We're all open to suggestions..... Although Field Day seems a long way off, it's not too early to start planning. As Captain of the 20 meter effort, we almost beat the 15 meter gang. This year I will again be in charge of 20 meters on Field Day and will take on all challenges from other band teams.....

This month the board will be looking for a site for Field Day and will announce it in the next issue of "RF" (suggestions anyone??)

My apologies for not being able to attend the first club meeting of 1984, but the U.S.M.C. requires my services elsewhere. I finally completed that questionnaire which will be distributed at the club meeting and look forward to your comments. We will be mailing out questionnaires to members who do not attend the meeting and also to past club members.....

Chris Breller  
KA6IMP

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\*\*\*\*\* SWAP MEET \*\*\*\*\*

The Orange County Ham-Computer Electronics Swap Meet will still be held on the second Sunday of each month, but the place has been changed to;

ORANGE COAST COLLEGE PARKING LOT  
(behind the regular swap meet  
which is held every Sunday)

SEE THE FLYER IN THIS MONTH'S "RF" FOR FURTHER DETAILS

Jan. 1984

\*\*\*\*\* BOARD MEETING MINUTES \*\*\*\*\*  
JANUARY 8, 1984

Meeting opened at 3:36 PM

Officers in attendance: Chris KA6IMP, Dot W6IBP, Ken W6HHC  
Al W6IBR, Keith WB6LAR, Jim N6JSV

1. Questionnaire regarding suggestions for the improvement in club program, activity, operation, etc. be mailed to present and past members for their input suggested by Chris KA6IMP. Motion to pass by Dot W6IBP, seconded by Jim N6JSV. Motion passed.
2. Future social activities for members discussed.
3. Tentative Field Day plans discussed: ie: Potential sites, generator availability, Field Day Chairman, Band Captains. Field Day dates are June 23 & 24, 1984.
4. Possibility of having baby sitting available to club members so spouses can participate in club meetings.
5. Check on current club insurance and premium structure.
6. Code and theory classes to begin starting Feb. 4th at Red Cross Hqs., Santa Ana beginning at 9:30 AM for a period of 8 weeks. For further information, call either Chris or Al.
7. Change in meeting place for the monthly breakfast from the Cookbook Restaurant to Mim's across the street at 17231 17th Street, Tustin. PH: 544-5522. Same time 8:00 AM.
8. A donation to be made in the amount of \$30 to the fuel fund for Tom Christian, VR6TC, in the name of the OCARC. Motion made by Jim N6JSV, seconded by Chris KA6IMP. Motion passed.
9. A letter of authorization to give to Kei, W6NGO, to dispose of useless club generator for whatever can be gotten for it, and any monies to be deposited in club treasury.

Meeting adjourned at 4:38 PM

# ORANGE COUNTY

## Ham Computer Electronics

# SWAP MEET

FREE TO BUYERS

FREE PARKING

SECOND SUNDAY EVERY MONTH

STARTING DECEMBER 11, 1983

ORANGE COAST COLLEGE

\$5.00 SELLERS

OR

REDUCED GROUP RATES

INCLUDES

SEPARATE SECTION SET ASIDE JUST FOR  
YOUR ELECTRONICS SALES.

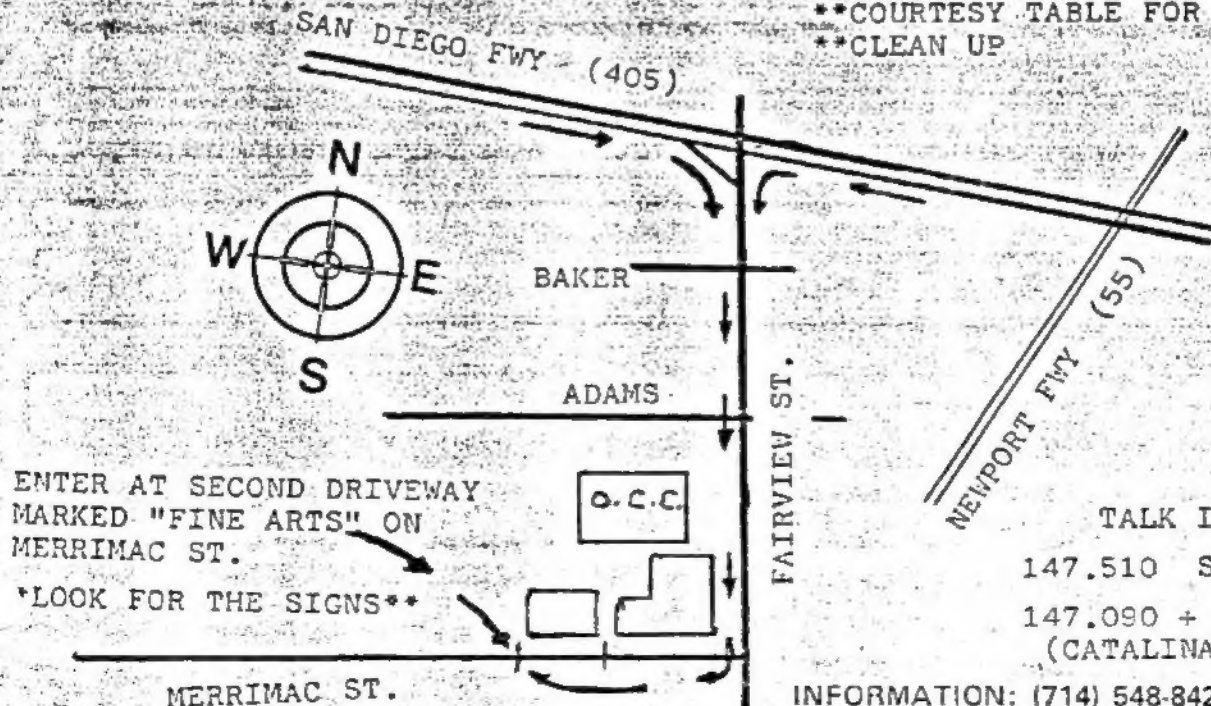
SEPARATE NON CONGESTED ENTERANCE FOR  
ELECTRONICS SELLERS AND BUYERS

BRING THE FAMILY, PLENTY TO SEE AND  
DO FOR ALL INTERESTS IN THE REGULAR  
SWAP MEET SECTION

YOU CAN NOW RESERVE YOUR SPACE FOR  
THE NEXT MONTHS SWAP MEET

7:00 A.M. TO WHENEVER

- \*\* SPACE
- \*\*ADVERTISING
- \*\*POWER
- \*\*BATHROOMS
- \*\*DRAWING FOR FREE SPACE
- \*\*DRINKING FOUNTAINS
- \*\*AVAILABLE REFRESHMENTS
- \*\*ESTABLISHED LOCATION
- \*\*HIGH EXPOSURE AND VISIBILITY
- \*\*COURTESY TABLE FOR CLUB NEWS
- \*\*CLEAN UP



TALK IN

147.510 SIMPLEX

147.090 + 600

(CATALINA REPEATER)

INFORMATION: (714) 548-8424 after 6 p.m.



Stephen Mendelsohn, WA2DHF  
ARRL Hudson Division  
Vice Director  
64 Maiden Lane  
Little Ferry, NJ 07643

June 28, 1983

# A Simple Resistive Audio Multiple Distribution System By Stephen Mendelsohn, WA2DHF

The time comes in any ham's life when he is called on to do public service work of one type or another. If he is public relations oriented he may want to take the audio from his receiver and feed it to several broadcast audio tape recorders, or the audio input to a commercial video tape recorder. These devices all use a 600 ohm balanced input. The receiver frequently has an output that is 8 ohms, unbalanced. The trick of designing an audio multiple output distribution system, or "mult box" as it is known in the broadcast trade, is to match the drive impedance (the receiver) to the load impedance for the broadcast equipment. Levels are the second thing that one must match. The input to most of the broadcast equipment is either "mic" level which is -45 to -60 dB at 600 ohms, or "line" level which is -10 to -25 dB at 600 ohms. The output of the average receiver, whether 2-meter fm or low bands, will vary between +6 and -10 dB at 8 ohms. Now that we have all of the required data, how do we make it all work together?

If you take the output of your headphone jack and connect it to the line input jack on a piece of professional equipment, you may wind up with lots of hum and distortion. This is because the impedances are badly mismatched. To use an antenna term, the SWR is too high. The hum will be from a lack of isolation. What we need is a resistive device that will perform three functions.

1) Isolation of the source from the load; 2) Match different impedances and 3) Drop the line level output of the receiver to a mic level satisfactory for the broadcast equipment. This requires the design of two different types of audio pads. Each pad is designed using common resistors that could be assembled on a standard perf board using "flea" clips to allow connections to be made to the equipment.

Section A of the pad is a standard "O pad". It acts to give isolation, and match impedances. Because not all receivers give the same audio output, several values of resistors (listed in table 1), which will give various levels of attenuation. In all cases the driving impedance is 8 ohms, and the load impedance is 600 ohms.

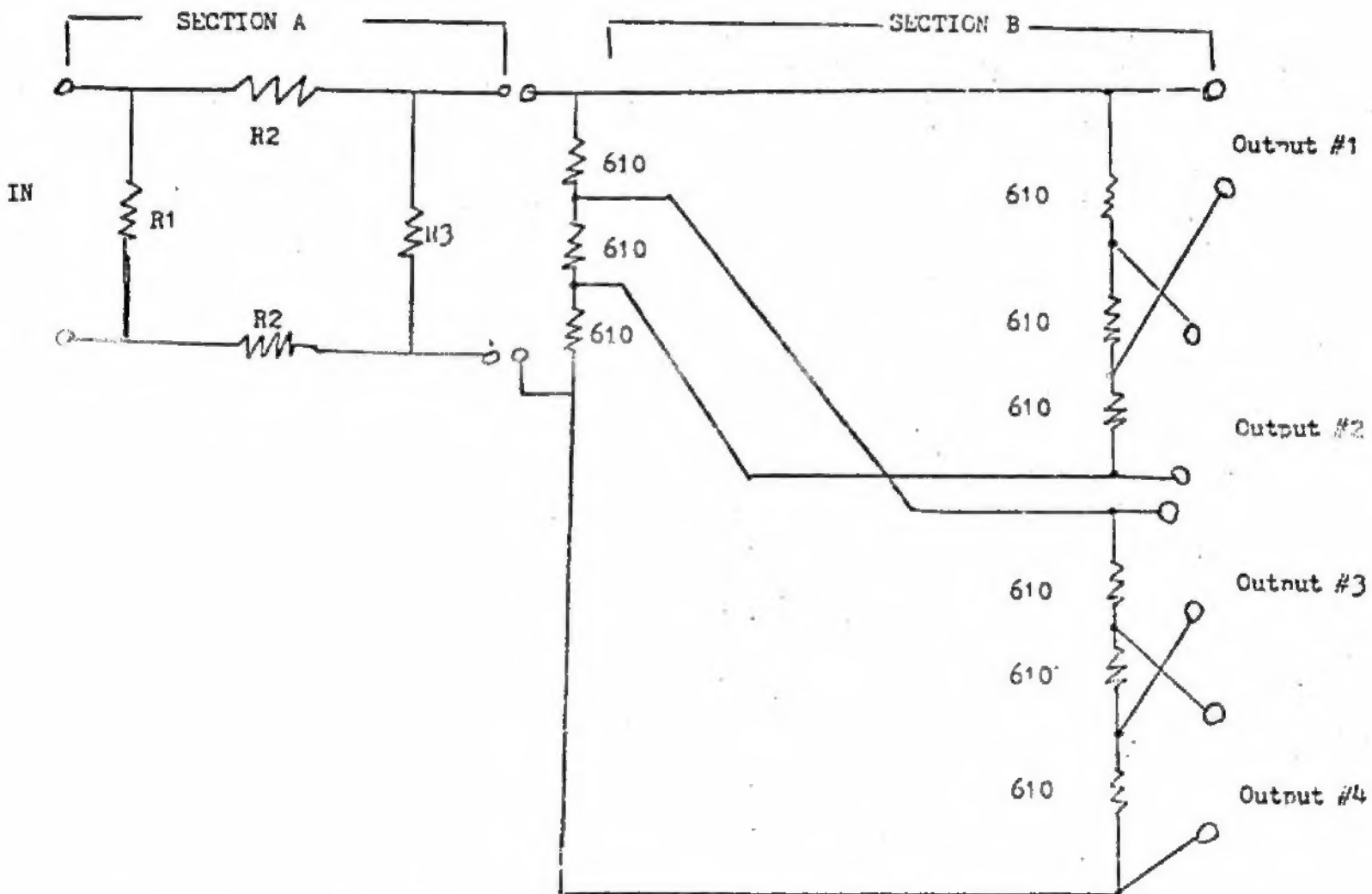
Section B of the pad is designed to take a single input and produce 4 outputs at 600 ohms with a 12 dB loss between input and output. In each case the four outputs will be isolated from each other, and provide correct level. All resistance values are 610 ohms for this section.

The resistors are all standard value half-watt types that can be found in a junk box or purchased at a parts store for a dollar or two. The resistors may be laid out in any fashion within reason. Keep the leads short since RF can creep into anything. In most cases, the broadcast equipment will be clipped on with small alligator clips provided by the reporter, but it doesn't hurt to have a Sony type mini-plug connected to one of the outputs. If you can save the reporter even one step, it will help to assure your story getting on the air. And getting the story on the air is the name of the game in the public relations business.

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Table 1    Section A    "O Pad" values  
 Input=8 ohms    Output=600 ohms

Attenuation	R1	R2	R3
10dB	6.8 ohms	51 ohms	620 ohms
20dB	8.2 ohms	180 ohms	620 ohms
30dB	8.2 ohms	560 ohms	620 ohms
40dB	8.2 ohms	1.8k ohms	620 ohms



INPUT=8 Ohms from receiver  
 Outputs=600 Ohms to recording equipment

January 1984

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PO BOX 95  
ORANGE, CA 92668



FIRST CLASS